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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/765,058	01/16/2001	Mandayam Andampikai Sridhar	AMPSP003	7712

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IPSG, P.C.
P.O. BOX 700640
SAN JOSE, CA 95170-0640

EXAMINER

LY, ANH

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 05/07/2004

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/765,058

Applicant(s)

SRIDHAR, MANDAYAM
ANDAMPIKAI

Examiner

Anh Ly

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date #6.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is response to Applicant's amendment file on 09/08/2003.
2. Claim 2 has been cancelled.
3. Claims 1 and 3-4 are pending in this application.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,933,831 issued to Jorgensen in view of US Patent No. 6,629,091 issued to Miura et al. (hereinafter Miura).

With respect to claim 1, Jorgensen discloses automatically creating a first user data model for said link table (the generation of hyperlinked entity relationship: col. 6, lines 24-30; also see abstract and fig. 2) , said first user data model representing said link table (col. 2, lines 23-26 and see fig. 4) as a child vector node (child table: col. 5, lines 28-40) and said foreign key attribute as an attribute of said child vector node (see fig. 4 and abstract; also see col. 2, lines 20-26);

automatically substituting said foreign key attribute in said first user data model with a given attribute associated with said one of said plurality of said other tables, said

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given attribute is an attribute arbitrarily selected from attributes of said one of said plurality of other tables, thereby forming a second user data model (primary key attribute is an foreign key attribute of other table: see fig. 4, Location-ID and Lot-ID in table of Product); and

creating a dereferenced table from said link table using said second user data model, said dereferenced table providing, for each of said plurality of link records (in the relational database, the linked tables will including a plurality of link records: col. 2, lines 23-26), content associated with said given attribute in a given record of said one of said other tables for a value associated with said foreign key attribute in said link table, said value associated with said foreign key attribute in said link table identifying said given record of said one of said other tables (col. 2, lines 18-26), said content associated with said given attribute being different from said value associated with said foreign key attribute that identifies said given record of said one of other tables (col. 2, lines 10-25; also see fig 4, col. 1, lines 12-42 and col. 3, lines 48-65).

Jorgensen teaches an entity relationship (ER) diagram is created for a relational database, displayable linked table, which is storing a plurality of link records, primary key attribute and foreign key attribute (see fig. 4, col. 1, lines 12-42) and automatically reflects changes to the database tables (col. 6, lines 18-32 and see abstract).

Jorgensen does not explicitly teaches automatically create a first user data model for said link table and a dereferenced table from said link table.

However, Miura teaches an intermediary link table, which is containing link information, is automatically generated (see fig. 8, col. 5, lines 52-58 and col. 9, lines

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10-67 and col. 10, lines 1-18), and a plurality of link records are generated (col. 9, lines 40-67).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Jorgensen with the teachings of Miura so as to have a intermediary table or junction table using to form the association between the entities in the table by using foreign key attributes and dereferencing table containing a plurality of link of records. The motivation being to have a table for storing the link or relationship information shown in the relation between the tables that are automatically generated based on the entity relationship or data model for a relational database

With respect to claim 3, Jorgensen discloses wherein said given attribute is the first attribute that comes after the record ID attribute in said one of said plurality of other tables (primary key: see abstract, col. 4, lines 53-55).

With respect to claim 4, Jorgensen discloses presenting said second user data model to a user prior to said creating; permitting said user to specify a user-specified attribute as a substitute for said foreign key attribute, said user-specified attribute representing either a single attribute of said one of said plurality of other tables or a compound attribute that includes multiple attributes of said one of said plurality of other tables; and updating said given attribute with said user-specified attribute (see fig. 4 and col. 1, lines 22-45).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Contact Information

7. Any inquiry concerning this communication should be directed to Anh Ly whose telephone number is (703) 306-4527 or via E-Mail: **ANH.LY@USPTO.GOV**. The examiner can be reached on Monday – Friday from 8:00 AM to 4:00 PM.

If attempts to reach the examiner are unsuccessful, see the examiner's supervisor, John Breene, can be reached on (703) 305-9790.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks


Washington, D.C. 20231

or faxed to: Central Office (703) 872-9306 (Central Official Fax Number)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Fourth Floor (receptionist).

Inquiries of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

ANH LY 
APR. 29th, 2004


JEAN M. CORRIELUS
PRIMARY EXAMINER